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10/699,264	10/30/2003	Sherif Yacoub	200309365-1	2032
22879 7590 07/11/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				
EXAMINER PHAN, JOSEPH T				
ART UNIT		PAPER NUMBER		
2614				
NOTIFICATION DATE		DELIVERY MODE		
07/11/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/699,264

**Applicant(s)**

YACOB, SHERIF

**Examiner**

Joseph T. Phan

**Art Unit**

2614

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17 is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 18 and 19 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 18 and 19 recites "a computer-usable medium embodying computer program code". Applicant's specification does not define the "computer-usable medium" to perform the followed limitations and therefore since a "computer-usable medium" could comprise of paper with typed computer code that could be scanned and interpreted, which is non-statutory subject matter, the claims are rejected. Appropriate clarification and/or correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-16 and 18-22 rejected under 35 U.S.C. 102(e) as being anticipated by Comerford et al., Patent #6,748,361

Regarding claims 1 and 20, Comerford teaches a method and means(Fig.1) for call center dialog management, comprising: means for presenting a contact with a first call center dialog segment having a current call center dialog property(col.18 line 66-col.19 line 5); receiving from the contact a contact dialog segment(col.19 lines 10-14); identifying a dialog property keyword within the contact dialog segment(col.19 lines 10-14; 'slower'), the dialog property keyword including a request for a modification of the current call center property, replacing the current call center dialog property with a new call center dialog in accordance with the request(col.19 lines 10-14); and presenting a second call center dialog segment having the new call center dialog property to the contact(col.19 lines 10-14).

Regarding claim 2, Comerford teaches the method of claim 1, wherein the dialog property keyword indicates a dialog speed and wherein replacing includes replacing a first dialog speed with a second dialog speed(col.19 lines 10-14).

Regarding claim 3, Comerford teaches a method of claim 1: wherein the dialog property keyword indicates a dialog language(col.6 lines 29-38); and wherein replacing includes replacing a first dialog language with a second dialog language(col.19 lines 10-14; second dialog language is slower and therefore a clearer language).

Regarding claim 4, Comerford teaches a method of claim 1: wherein the dialog property keyword indicates a contact expertise level(16010 Fig.16); and wherein replacing includes replacing a first contact expertise level with a second contact

expertise level(16018 Fig.16).

Regarding claim 5, Comerford teaches the method of claim 1, wherein the dialog property keyword indicates a contact help level(col.18 lines 13-23 and col.19 lines 10-14); and wherein replacing includes replacing a first contact help level with a second contact help level(col.18 lines 13-23 and col.19 lines 10-14).

Regarding claim 6, Comerford teaches the method of claim 1, wherein replacing includes replacing a first pre-recorded call center dialog segment having the current call center dialog property with a second pre-recorded dialog segment having the new center dialog property(col.19 lines 10-14).

Regarding claim 7, Comerford teaches the method of claim 1: wherein replacing includes adjusting a text-to-speech synthesizer from generating center dialog segments having the current call center dialog property toward generating center dialog segments having the new call center dialog property(col.18 line 23-col.19 line 14).

Regarding claim 8, Comerford teaches the method of claim 1: wherein replacing includes adjusting a Voice-XML prosody tag from generating center dialog segments having the current call center dialog property toward generating center dialog segments having the new call center dialog property(col.12 lines 10-25).

Regarding claim 9, Comerford teaches the method of claim 1; wherein replacing includes adjusting a digital signal processor time-scale modification(col.18 lines 13-23 and col.19 lines 10-14).

Regarding claim 10, Comerford teaches the method of claim 1: further comprising, generating a set of dialog metrics from the contact dialog segment; and comparing the set of

dialog metrics against a set of dialog metric thresholds; and wherein replacing includes, replacing the current call center dialog property with a second new call center dialog property, if no dialog property keyword is identified and the generated dialog metrics vary from the first set of thresholds by a first predetermined amount(col.19 lines 10-14; *it is understood Comerford generates metrics from received dialog segments and compares to stored value thresholds so his system will know how to adjust the second dialog*).

**Regarding claims 11, 19, and 21,** Comerford teaches a method, system (Fig.1), and computer-usable medium embodying computer program code for call center dialog management, comprising: means for presenting a contact with a first call center dialog segment having a current call center dialog property(Fig.1 and col.18 line 66-col.19 line 5); receiving from the contact a contact dialog segment(col.19 lines 9-14); determining whether the contact dialog segment includes a request for help associated with interpreting the first call center dialog segment(col.18 lines 24-33 and col.19 lines 9-14); generating a first dialog metric based on the determination(col.18 lines 24-33, line 66-col.19 line 5, and col.19 lines 9-14); generating a set of dialog metrics including the first dialog metric from the contact dialog segment(col.18 lines 24-33, line 66-col.19 line 5, and col.19 lines 9-14); comparing the set of dialog metrics against a set of dialog metric thresholds((col.18 lines 24-33, line 66-col.19 line 5, and col.19 lines 9-14; *understood that Comerford compares the spoken keywords to a threshold since it can recognize it*); replacing the current call center dialog property with a new call center dialog property, if the generated dialog metrics vary from the set of thresholds by a predetermined amount(col.5 lines 50-67 and col.6 lines 29-38);

replacing the current call center dialog property with a second new call center dialog property, if no dialog property keyword is identified and the generated dialog metrics vary from the first set of thresholds by a first predetermined amount((col.18 lines 24-33, line 66-col.19 line 5, and col.19 lines 9-14); *Comerford generates metrics from received dialog segments and compares to stored value thresholds so his system will know how to adjust the second dialog*); and presenting a second call center dialog segment having the new call center dialog property to the contact (col.19 lines 9-14).

Regarding claim 12, Comerford teaches the method of claim 11 wherein generating includes: totaling a number of times the contact was asked to respond to the first call center dialog segment(Fig.16 and col.18; total number can also be one).

Regarding claim 13, Comerford teaches the method of claim 11 wherein generating includes: totaling a number of times the contact requested help(col.18 lines 24-33).

Regarding claim 14, Comerford teaches the method of claim 11 wherein generating includes: calculating how poor the contact's grammar is(col.18 lines 24-33, line 66-col.19 line 5, and col.19 lines 9-14; assumed contact is very poor to need help).

Regarding claim 15, Comerford teaches the method of claim 11 wherein replacing includes: replacing a first dialog speed with a second dialog speed(col.19 lines 9-14).

Regarding claim 16, Comerford teaches the method of claim 11 wherein replacing includes: replacing a first dialog language with a second dialog language(col.19 lines 9-14).

Regarding claim 18, Comerford teaches the computer-usable medium embodying computer program code(Fig.1) for commanding a computer to effect call center dialog management, comprising: presenting a contact with a first call center dialog segment having a

current call center dialog property(col.18 line 66-col.19 line 5);  
receiving from the contact a contact dialog segment(col.19 lines 9-14);  
identifying a dialog property keyword within the contact dialog segment(col.19 lines 9-14;  
“slower”);  
replacing the current call center dialog property with a new call center dialog  
property in response to the dialog property keyword(col.19 lines 9-14; new dialog property is  
slower output); and  
presenting a second call center dialog segment having the new call center  
dialog property to the contact(col.19 lines 9-14).

Regarding claim 22, Comerford teaches a system for call center dialog management,  
comprising: an interactive voice response module for presenting a contact with a first call center  
dialog segment having a current call center dialog property and receiving from the contact a  
contact dialog segment(col.18 lines 24-33, line 66-col.19 line 5, and col.19 lines 9-14);  
a dialog analysis module for identifying a dialog property keyword within the contact dialog  
segment, the dialog property keyword including a request for a modification of the current call  
center dialog property(col.19 lines 9-14; ‘slower’);  
a dialog property controller for replacing the current call center dialog property with a new call  
center dialog property in accordance with the request(col.19 lines 9-14); and  
wherein the interactive voice response module then presents a second call center dialog segment  
having the new call center dialog property to the contact(col.19 lines 9-14).

***Allowable Subject Matter***

5. Claim 17 allowed.



The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not teach the combination of recited features, including but not limited to "...  
*the segment including a keyword, generating a set of dialog metrics including the first dialog metric from the contact dialog segment, comparing the set of dialog metrics against a set of dialog metric thresholds,*  
*replacing the current call center dialog property with a new call center dialog property in accordance with the request based on the determination;*  
*replacing the current call center dialog property with a second new call center dialog property if no dialog property keyword is identified and the generated dialog metrics vary from the first set of thresholds by a first predetermined amount..."*

#### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph T. Phan whose telephone number is (571) 272-7544. The examiner can normally be reached on Mon-Fri 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph T Phan/  
Examiner, Art Unit 2614  
/Curtis Kuntz/  
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